State of Iowa - Return on Investment Program / IT Project Evaluation

Tracking Number (For Project Office Use)

SECTION 1: PROPOSAL

Project Name: Network compliance and standardization Date: 09/10/00

Agency Point of Contact for Project: Chuck Levy

Agency Point of Contact Phone Number / E-mail: 242-5362 / chuck.levy@icva.state.ia.us

Executive Sponsor (Agency Director or Designee) Signature: _____

Is this project necessary for compliance with a Federal standard, initiative, or statute? (If "Yes," cite specific requirement, attach copy of requirement, and explain in Proposal Summary)	❑ Yes	**X** No
Is this project required by State statute? (If "Yes," explain in Proposal Summary)	❑ Yes	**X** No
Does this project meet a health, safety or security requirement? (If "Yes," explain in Proposal Summary)	❑ Yes	**X** No
Is this project necessary for compliance with an enterprise technology standard? (If "Yes," explain in Proposal Summary)	❑ Yes	**X** No
Does this project contribute to meeting a strategic goal of government? (If "Yes," explain in Proposal Summary)	**X** Yes	❑ No
Is this a "research and development" project? (If "Yes," explain in Proposal Summary)	❑ Yes	**X** No

PROPOSAL SUMMARY:

In written detail, explain why the project is being undertaken and the results that are expected. This includes, but is not limited to, the following:

1. A pre-project (before implementation) and a post-project (after implementation) description of the system or process that will be impacted.

Pre-Project: All workstations are connected to an overcrowded hub and are causing data loss and network slowdowns. Data access to Veteran's military information on the ICVA's archaic storage system, network file server and the Internet is extremely slow and access to the State's Intranet is non-existent. Additional equipment cannot be added to the existing network configuration without a large-scale change to the cabling and hub structure in place in the ICVA office. Eventual slowdowns and possible network outages are imminent with the current architecture and out-of-date office systems in place today.

Post-Project: Secure cabling in wall or ceiling crawl spaces with cable ducting and a safe and reliable Internet/Intranet connection beyond the State's firewall to the State backbone via the ICN. Easy updates and additions to the network will now be possible.

2. A summary of the extent to which the project provides tangible and intangible benefits to either Iowa citizens or to State government. Included would be such items as qualifying for additional matching funds, improving the quality of life, reducing the government hassle factor, providing enhanced services, improving work processes, complying with enterprise technology standards, meeting a strategic goal, avoiding the loss of matching funds, avoiding program penalties/sanctions or interest charges, avoiding risks to health/security/safety, complying with federal or state laws, etc.

By standardizing our network and connecting to the State via a high-speed Internet connection and router, we will be able to use resources designed to help state offices in productivity and resource management, as well as provide a secure connection to the other departments within the State. This secure link to the State via its backbone will allow our Department to share access to our systems and database of over 4 million military records. It will also bring our office's network installation up to a compliance with standards of security and safety for Ethernet networks.

3. A summary that identifies the project stakeholders and how they are impacted by the project.

Stakeholders: All members of the ICVA administrative staff, Iowa citizens served by the ICVA and other State departments that will benefit from secure communications between our agency and their own.

SECTION 2: PROJECT PLAN

Individual project plans will vary depending upon the size and complexity of the project. A project plan includes the following information:

1. Agency Information

Project Executive Sponsor Responsibilities: Identify, in Section I, the executive who is the sponsor of the project. The sponsor must have the authority to ensure that adequate resources are available for the entire project, that there is commitment and support for the project, and that the organization will achieve successful project implementation.

Brian Bales, Executive Director of Iowa Commission of Veteran's Affairs, will be the sponsor of this project. A decision package for the ICVA's budget will provide funds for this project. ICVA's commitment and support for this project will consist of the designation of a project administrator, whose responsibility will be to verify accuracy of the finished work, and to keep all areas of the project on task and within timetable constraints.

Organization Skills: Identify the skills that are necessary for successful project implementation. Identify which of these skills are available within the agency and the source(s) and acquisition plan for the skills that are lacking.

The ICVA IT staff will supply the needed knowledge and experience for installation of the router and connections from file server to the other needed systems. ICN will provide setup and connection with the high-speed line and the backbone access. Camp Dodge telecommunications personnel will make changes within the structure, as these are National Guard buildings in which the ICVA offices are housed.

2. Project Information

Mission, Goals, Objectives: The project plan should clearly demonstrate that the project has developed from an idea to a detailed plan of action. The project plan must link the project to an agency's mission, goals, and objectives and define project objectives and how they will be reached. The project plan should include the following:

A. **Expectations**: A description of the purpose or reason that the effort is being undertaken and the results that are anticipated.

The objective of this project is to install a secure communications link to the State backbone and to complete a partial installation of the networked systems in the ICVA offices. After project completion, all resources offered to a State department should be available for regular use and a secure Internet connection with a managed firewall will be in place.

Another reason behind this project is the secure functioning and routing of the Department's Ethernet network. After the changes, the network will operate at it's maximum capability, providing efficient, accurate and secure data handling and sharing.

B. **Measures**: A description of the set of beliefs, tradeoffs and philosophies that govern the results of the project and their attainment. How is the project to be judged or valued? What criteria will be used to determine if the project is successful? What happens if the project fails?

As new equipment is put into place within the office environment, system checks and testing will determine whether the new network will provide the solution desired. One of the quality assurance measures will be to verify connections to the backup server with a lab setup before rollout to the office. Error free access to departmental data will be the determination of success for this project. Failure of the project will leave the ICVA open to possibility of system and data loss without any measures of quick replacement. With more than 30 requests per day from Iowa citizens and many more requests from service organizations and Veteran health care providers, we cannot allow our office to be offline for any number of days. Critical care to ailing veterans and their families must be provided in a matter of hours not days.

C. **Environment:** Who will provide input (e.g., businesses, other agencies, citizens) into the development of the solution? Are others creating similar or related projects? Are there cooperation opportunities?

We will be purchasing access to the backbone through the ICN and have arranged to purchase a spare router from them, as well.

D. **Project Management and Risk Mitigation**: A description of how you plan to manage the project budget, project scope, vendors, contracts and business process change (if applicable). Describe how you plan to mitigate project risk.

The project's budget will be managed by the ICVA, with funds being distributed as needed on the purchases of equipment or services rendered by the ICN, as required by the project plan. A program manager will be appointed from the IT department and will be responsible for all areas of management for this project.

E. **Security / Data Integrity / Data Accuracy / Information Privacy**: A description of the security requirements of the project? How will these requirements be integrated

into the project and tested. What measures will be taken to insure data integrity, data accuracy and information privacy?

Along with the purchase of a router and Internet access, an anti-viral software solution for the router and linked Internet Information Server must be purchased for protection of e-mail and overall system security. The ICVA IT staff will manage security for the Internet and networking connections.

3. Current Technology Environment (Describe the following):

A. **Software (Client Side / Server Side / Midrange / Mainframe)**

- Application software
- Operating system software
- Interfaces to other systems: Identify important or major interfaces to internal and external systems

No specific application hardware is currently being used for the Networked systems beyond the operating system software for the file server. The operating system is Microsoft's Windows NT 4.0 and NT 4.0 Server in an Office 97 environment. We also operated our own Exchange server for the office's e-mail and this will continue after installation of the new hardware.

B. **Hardware (Client Side / Server Side / Mid-range / Mainframe):**

- Platform, operating system, storage and physical environmental requirements.
- Connectivity and Bandwidth: If applicable, describe logical and physical connectivity.
- Interfaces to other systems: Identify important or major interfaces to internal and external systems.

A dual processor based 500 MHz files server with more than 21 GB of storage space will provide the main access across the ICVA's 10 MB Ethernet network. Currently there are no external interfaces to the file server beyond the National Guard router and Internet installation. Internal interfaces are limited to individual workstations connected to the file server via CAT-5 cabling and Ethernet hubs.

4. Proposed Environment (Describe the following):

A. Software (Client Side / Server side / Mid-range / Mainframe)

- Application software.
- Operating system software.
- Interfaces to other systems: Identify important or major interfaces to internal and external systems.
- General parameters if specific parameters are unknown or to be determined.

Firewall and Anti-virus software will be among the new systems operating on the installed network. Any necessary software from ICN to connect to the State backbone will also be included.

B. Hardware (Client Side / Server Side / Mid-range / Mainframe)

- Platform, operating system, storage and physical environmental requirements.
- Connectivity and Bandwidth: If applicable, describe logical and physical connectivity.
- Interfaces to other systems: Identify important or major interfaces to internal and external systems.
- General parameters if specific parameters are unknown or to be determined.

Cisco Router and UPS, physical connections to ICN via frame relay circuit and PVC installations. New cable ducting and patch panel in communications area of office. Any other required miscellaneous items for network standardization.

Data Elements: If the project creates a new database the project plan should include the specific software involved and a general description of the data elements.

N/A

Project Schedule: A schedule that includes: time lines, resources, tasks, checkpoints, deliverables and responsible parties.

Project Timeline: This project is dependent upon the work schedules of the Camp Dodge telecommunications personnel. Currently, there is a wait of approximately 4-6 weeks on projects and installations. Assuming project start date of July 1, 2001, this project should be complete by August 31, 2001.

- Start of cabling work in ICVA office - July 1
- Length of project – approx. 10 days.
- Installation of PVC and frame relay circuit – time provided by ICN.
- Installation of router and associated hardware/software – 3-7 days.

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SECTION 3: Return On Investment (ROI) Financial Analysis

Project Budget:

Provide the estimated project cost by expense category.

	Total:	Annual:
Personnel	$ 0.00	$ 0
Software	$ 500 / 4	$ 125
Hardware	$ 9,500 / 3	$ 3,167* adjusted for hardware useful life
Training	$ 0.00	$ 0
Facilities	$ 2,100 / 3	$ 700* adjusted for hardware useful life
Professional Services	$ 14,000 (14,000 – 12,800 / 3)	$ 400* adjusted annual project cost see future cost cat. below
Supplies	$ 0.00	$ 0
Other (Specify)	$ 4,500	$ 0* see annual maintenance cost below
Total	$ 30,600	$4,392

Project Funding:

Provide the estimated project cost by funding source.

State Funds	$ 30,600.00	100 % of total cost
Federal Funds	$	% of total cost
Local Gov. Funds	$	% of total cost
Private Funds	$	% of total cost
Other Funds (Specify)	$	% of total cost
Total Cost:	$	% of total cost

Provide the estimated project cost by fiscal year.

Estimated project cost by fiscal year: FY 02 $30,600

How much of the cost would be incurred by your agency from normal operating budgets (staff, equipment, etc.)? …$ 0 0 %

How much of the cost would be paid by requested State IT project funds? $ 30,600.00 100 %

Identify, list, and quantify all annual maintenance expenses (State Share) related to the project.

Annual maintenance cost of $4,500 for router and associated equipment.

Identify, list, and quantify any other future expenses (State Share) related to the project.

On-going yearly cost of $12,800 for T-1 and State backbone access.

ROI Financial Worksheet Directions (Attach Written Detail as Requested):

Annual Pre-Project Cost -- Quantify, in written detail, all actual State government direct and indirect costs (personnel, support, equipment, etc.) associated with the activity, system or process prior to project implementation. This section should be completed only if State government costs are expected to be reduced as a result of project implementation.

Annual Post-Project Cost -- Quantify, in written detail, all estimated State government direct and indirect costs associated with activity, system or process after project implementation. This section should be completed only if State government costs are expected to be reduced as a result of project implementation.

State Government Benefit -- Subtract the total "Annual Post-Project Cost" from the total "Annual Pre-Project Cost." This section should be completed only if State government costs are expected to be reduced as a result of project implementation.

Citizen Benefit -- Quantify, in written detail, the estimated annual value of the project to Iowa citizens**.** This includes the "hard cost" value of avoiding expenses (hidden taxes) related to conducting business with State government. These expenses may be of a personal or business nature. They could be related to transportation, the time expended on or waiting for the manual processing of governmental paperwork such as licenses or applications, taking time off work, mailing, or other similar expenses.

Opportunity Value/Risk or Loss Avoidance Benefit -- Quantify, in written detail, the estimated annual benefit to Iowa citizens or to State government. This could include such items as qualifying for additional matching funds, avoiding the loss of matching funds, avoiding program penalties/sanctions or interest charges, avoiding risks to health/security/safety, avoiding the consequences of not complying with State or federal laws, providing enhanced services, avoiding the consequences of not complying with enterprise technology standards, etc.

Total Annual Project Benefit -- Add the values of all annual benefit categories.

Total Annual Project Cost -- Quantify, in written detail, the estimated annual new cost necessary to implement and maintain the project including consulting fees, equipment retirement, ongoing expenses (i.e. labor, etc.), other technology (hardware, software and development), and any other specifically identifiable project related expense. In general, to calculate the annual hardware cost, divide the hardware and associated costs by three (3), the useful life. In general, to calculate the annual software cost, divide the software and associated costs by four (4), the useful life. This may require assigning consulting fees to hardware cost or to software cost. A different useful life may be used if it can be documented.

Benefit / Cost Ratio – Divide the "Total Annual Project Benefit" by the "Total Annual Project Cost." If the resulting figure is greater than one (1.00), then the annual project benefits exceed the annual project cost. If the resulting figure is less than one (1.00), then the annual project benefits are less than the annual project cost.

ROI -- Subtract the "Total Annual Project Cost" from the "Total Annual Project Benefit" and divide by the amount of the requested State IT project funds.

Benefits Not Cost Related or Quantifiable -- List the project benefits and articulate, in written detail, why they (IT innovation, unique system application, utilization of new technology, hidden taxes, improving the quality of life, reducing the government hassle factor, meeting a strategic goal, etc.) are not cost related or quantifiable. Rate the importance of these benefits on a "1 – 10" basis, with "10" being of highest importance. Check the "Benefits Not Cost Related or Quantifiable" box in the applicable row.

ROI Financial Worksheet

Annual Pre-Project Cost - How You Perform The Function(s) Now		
FTE Cost (salary plus benefits):	**$19,717.00**	
Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):	**$6,175.00**	
Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.):	**$2,640.00**	
A. Total Annual Pre-Project Cost:	**$28,532.00**	
Annual Post-Project Cost – How You Propose to Perform the Function(s)		
FTE Cost:	**$3,110.00**	
Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):	**$1,000.00**	
Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.):	**$17,620.00**	***annual communications costs – incl. Adj. Project and Maintenance Costs**
B. Total Annual Post-Project Cost:	**$21,730.00**	
State Government Benefit (= A-B):	**$6,802.00**	
Annual Benefit Summary		
State Government Benefit:	**$6,802.00**	
Citizen Benefit (including quantifiable "hidden taxes"):	**$7,200.00**	
Opportunity Value and Risk/Loss Avoidance Benefit:		
C. Total Annual Project Benefit:	**$14,002.00**	
D. Total Annual Project Cost:	**$4,392.00**	
Benefit / Cost Ratio (C / D):	**3.19**	
ROI (C – D / Requested State IT Project Funds):	**31 %**	
X Benefits Not Cost Related or Quantifiable (including non-quantifiable "hidden taxes")		

Annual Pre-Project Cost – Assuming office personnel using system and it's slowdowns and reboot times allowing 4 hours weekly for support staff @ 32.72/hr. and 10 hours weekly for ITS4 support @ 24.83/hr. These costs include time to re-sign in when network dropped, time lost in work for unsaved applications, reboot/reload time, restoring from backed up files and slower system resources access. Total $379.18/week or yearly FTE Costs = $19,717.00.

Support costs include the costs of bringing in outside vendors to support FileTrax system and any miscellaneous networking done by National Guard Personnel, as they support this network on Camp Dodge.

Other costs include cost of network cabling, replacement hubs, network interface cards (NICs) and associated networking materials.

Annual Post-Project Cost – Costs drop substantially. The breakdown includes 30 minutes weekly for support and about 1.5 hours of ITS4 support time for network complications and maintenance. Using the same figures from above, Totals down to $59.81/week FTE Costs or $3,110.00 yearly.

Support costs include miscellaneous work done by NG personnel for Dodge maintenance and miscellaneous network supplies, such as cabling.

Other costs include the yearly charge for access for the T-1 line and State Backbone access provided by ICN. $1,067.00/mo. for access charges and ICN support or $12,804.00, $4,500.00 for equipment maintenance agreements, along with small fees for DNS and newsgroup monthly charges.

Citizen Benefit – With this new system in place, the network slowdowns or outages that this office has currently been experiencing, will hopefully be eliminated or at worst brought down to bare minimum times. Estimating 10 people coming in to our office requesting documentation and 50 persons calling in with requests and a network outage at the time of the requests. 60 Iowa veterans taking 1 hour of lunchtime with a generous hourly wage amount of $10 would have to wait and try again at another time. This brings the citizen cost to approximately $600 per occurrence. Currently, outages/slowdowns are as infrequent as once per month or $7200 citizen cost yearly. This will be to the benefit of Iowa's veterans when these times are eliminated and all information requests can be carried out immediately.

Total Annual Project Cost – Project costs include: $2,100.00 for installations via ICN, $14,000.00 for 1 years worth of access through ICN and internal wiring beyond d-marc, $500.00 software purchase for Cisco router software and maintenance, $4,500.00 for maintenance agreements and $9,500.00 for hardware purchases including said router and associated equipment for State backbone access and possible VoFR (voice over frame relay) architecture. When figuring "pure" annual project cost, exclusive of maintenance and access fees, the cost is $4,392.

The Iowa Commission of Veteran's Affairs has a commitment to provide Iowa's 286,000 veterans, veteran service organizations, and the spouses and family members of veterans who have given their lives in service to the United States with their military records when needed. As these veterans age, it becomes critically important that the ICVA is able to provide these 4 million electronic records using state-of-the-art hardware and software and to not allow the older, slower systems to affect how benefits and aid can be provided to the veteran. By ensuring that these necessary documents are easy to locate and retrieve those organizations that depend on these papers to admit or process benefit applications will be able to do so with a minimum amount of wasted time. In the eyes of the older Iowa veteran in need of this medical care or service, this "improvement" will be an expected necessity.